Message

From: Praskins, Wayne [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=4F47BC0A2C2E42A98347D59CD1A98B19-WPRASKIN]

Sent: 4/29/2021 10:27:31 PM

To: Robinson, Derek J CIV USN NAVFAC SW SAN CA (USA) [derek.j.robinson1@navy.mil]

CC: Hays, David C Jr CIV USARMY CENWK (USA [David.C.Hays@usace.army.mil]; Liscio, Matthew P CIV USN NAVSEA DET

RASO VA (USA) [matthew.liscio@navy.mil]; Craig Bias [cbias@remwerks.com]

Subject: RE: HPNS Navy RESARD BUILD Results

I see in Equation E.2 that dose (and risk) via the ingestion pathway is proportional to contaminated area. What is the rationale for assuming a 12' 12' room if larger room/building sizes increase the estimated dose and risk?

Wayne Praskins | Superfund Project Manager U.S. Environmental Protection Agency Region 9 75 Hawthorne St. (SFD-7-3) San Francisco, CA 94105 415-972-3181

From: Craig Bias <cbias@remwerks.com> **Sent:** Thursday, April 29, 2021 10:00 AM

To: Robinson, Derek J CIV USN NAVFAC SW SAN CA (USA) <derek.j.robinson1@navy.mil>; Praskins, Wayne

<Praskins.Wayne@epa.gov>

Cc: Hays, David C Jr CIV USARMY CENWK (USA) < David.C. Hays@usace.army.mil>; Liscio, Matthew P CIV SEA 04, NAVSEA

DET RASO <matthew.liscio@navy.mil>

Subject: RE: HPNS Navy RESARD BUILD Results

Sorry, I mistyped 17.7 pCi Co below... I meant 9.61E+06... compared to the calculated unit intake activity of 5.43E+05 in Column M.

From: Craig Bias

Sent: Thursday, April 29, 2021 11:44 AM

To: Robinson, Derek J CIV USN NAVFAC SW SAN CA (USA) < derek.j.robinson1@navy.mil; Praskins, Wayne

<Praskins.Wayne@epa.gov>

Cc: Hays, David C Jr CIV USARMY CENWK (USA) < David.C. Hays@usace.army.mil >; Liscio, Matthew P CIV SEA 04, NAVSEA

DET RASO <matthew.liscio@navy.mil>

Subject: RE: HPNS Navy RESARD BUILD Results

Here is an input file for Co-60 to check our DCFs.

For clarification on a couple things today regarding Equation E.2 in BUILD manual.

- D(t) is not an instantaneous direction ingestion dose, but rather an integrated dose over the 26 years.
- Q(t) is basically the total source activity and is 100% fixed. That is the input activity concentration (2.25E+05 pCi/m2 for Co-60) times the total contaminated area (~43 m^2) or ~17.7 pCi for Co-60.
- Since the ingestion DCF and SF are dose per unit intake, we need to redefine the quantity in Column M (estimated activity, pCi). That is the calculated unit intake (pCi) and quantitatively is (24 ED Fin Fi) ERI fR Q(t) in Eqn E.2. It is not just Q(t).
- Similarly, since the external DCF and SF are dose per unit time-integrated activity concentration, we need to
 redefine the quantity in Column W (estimated activity concentration, pCi/m^2). That is the calculated unit timeintegrated activity concentration (1/yr/pCi/m^2) if we use the surface DCFs. RESRAD is actually assuming the
 source term is a volume source that is 0.01 cm thick and uses Eqn F.1 and the volume DCFs. To calculate W, I

guess we could divide the external dose by the volume DCFs to get the unit time-integrated activity concentration (1/yr/pCi/g) and then multiply by the soil volume SFs, but it should be a similar result.

Craig

From: Robinson, Derek J CIV USN NAVFAC SW SAN CA (USA) < derek.j.robinson1@navy.mil>

Sent: Thursday, April 29, 2021 11:11 AM

To: Praskins, Wayne < Praskins. Wayne@epa.gov>

Cc: Hays, David C Jr CIV USARMY CENWK (USA) < David.C.Hays@usace.army.mil>; Craig Bias < cbias@remwerks.com>

Subject: RE: HPNS Navy RESARD BUILD Results

Yes, please do. I encourage the information exchange.

I included Craig on this response, so that he knows to expect your call.

Derek

From: Praskins, Wayne < Praskins. Wayne@epa.gov>

Sent: Thursday, April 29, 2021 8:41 AM

To: Robinson, Derek J CIV USN NAVFAC SW SAN CA (USA) <derek.j.robinson1@navy.mil>

Cc: Hays, David C Jr CIV USARMY CENWK (USA) < David.C.Hays@usace.army.mil>

Subject: [Non-DoD Source] RE: HPNS Navy RESARD BUILD Results

Derek -

Thanks for setting up this morning's call. To keep things moving, is it OK for Dave to call Craig Bias if he has additional questions?

Wayne Praskins | Superfund Project Manager U.S. Environmental Protection Agency Region 9 75 Hawthorne St. (SFD-7-3) San Francisco, CA 94105 415-972-3181

From: Robinson, Derek J CIV USN NAVFAC SW SAN CA (USA) derek.j.robinson1@navy.mil

Sent: Tuesday, April 27, 2021 12:49 PM

To: Praskins, Wayne < Praskins. Wayne@epa.gov>

Cc: Hays, David C Jr CIV USARMY CENWK (USA) < David.C.Hays@usace.army.mil>

Subject: RE: HPNS Navy RESARD BUILD Results

Thanks Wayne and Dave! I sent the follow-up meeting request and will let you know.

From: Praskins, Wayne < Praskins. Wayne@epa.gov>

Sent: Tuesday, April 27, 2021 12:05 PM

To: Robinson, Derek J CIV USN NAVFAC SW SAN CA (USA) < derek.j.robinson1@navy.mil >

Cc: Hays, David C Jr CIV USARMY CENWK (USA) < David.C.Hays@usace.army.mil>

Subject: [Non-DoD Source] HPNS Navy RESARD BUILD Results

Derek -

Dave Hays and I had a chance to talk about last week's Navy building RG submittal this morning. Dave has a question or two he would like to ask and should be able to join us this Thursday; I just forwarded your invite.

I don't expect we'll be able to have a detailed discussion on Thursday and would like to schedule a followup call for next week. Dave is in training Monday thru mid-day Thursday; is your group available for a followup call Thursday, 5/6 between noon and 2 PDT? I'm copying Dave on this email.

Wayne Praskins | Superfund Project Manager U.S. Environmental Protection Agency Region 9 75 Hawthorne St. (SFD-7-3) San Francisco, CA 94105 415-972-3181